

REMARKS

This Amendment is being filed in response to the Final Office Action dated July 9, 2007. Reconsideration and allowance of the application in view of the remarks to follow are respectfully requested.

Claims 1-15 are currently pending in the Application. Claims 1 and 8 are independent claims.

Claims 1-15 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 6,229,773 (Chou). This position is respectfully refuted. It is respectfully submitted that these claims are patentable for at least the following reasons.

Chou is directed towards an optical disk reading device that reduces fluctuation of the optical pickup head. In Chou, the optical pickup head (PUH in FIG. 1) is situated on a movable sled and the tracking coil 140 is located on the optical pick up head. In Chou, "[s]ince the Coil is not a strong rigid body, it physically vibrates or fluctuates relative to the Sled as the Sled is accelerated or decelerated" (see, FIG. 7D and the accompanying description contained in Col. 7, lines 65-67). To reduce the fluctuation of the tracking coil in Chou, the (emphasis added) "position of the Coils can be adjusted by...an external exerting

force" applied to the coil (Col. 8, lines 19-20). As should be clear from an examination of FIGs. 7 and 10-13, Chou in fact merely teaches applying a compensating external force to the coil.

As made clear by Chou, "In FIG. 7A, as the Sled with the Coil moves from position A to position B of the optical disc, an exerting force is applied on the Sled as shown in FIG. 7B." Clearly the force shown in FIG. 7B, the force applied to the sled, has no compensating force. As is further clear by each of FIGs. 10-13, the acceleration of the coil,  $f(s)$  (see, Col. 6, lines 54-59), is fed back to the coil control circuit for purposes of controlling the coil. The only feedback in the sled control circuit is the feedback "Kv [that] is a constant of an anti-electromotive force (EMF)" termed a "Friction Back EMF in the figures. (See, Col. 9, lines 28-29.)

Therefore, it is respectfully submitted that the method of claim 1 is not anticipated or made obvious by the teachings of Chou. For example, Chou does not disclose or suggest a method that amongst other patentable elements, comprises (illustrative emphasis provided):

"detecting at least one of a substantial  
deceleration, acceleration and stop of the sledge  
when moving radially by detecting a radial

displacement of said platform with respect to  
said sledge; and  
controlling the sledge based upon the  
detecting acts"

as required by claim 1 and as substantially required by claim 8.

Chou nowhere discloses or suggests detecting at least one of a  
substantial deceleration, acceleration and stop of the sledge by  
detecting a radial displacement of said platform with respect to  
said sledge and controlling the sledge based upon the detecting  
acts as required by claim 1, and substantially required by claim 8,  
of the present system. Even assuming, in arguendo, tracking coils  
140 can be substituted for "the platform" in claim 1, there is no  
showing of controlling the sled/sledge based upon these detecting  
acts in Chou as required by claim 1, and substantially required by  
claim 8, of the present invention, rather, Chou applies an external  
force on the tracking coils to control the fluctuation of the  
tracking coils versus the sled.

The Final Office Action has taken a position that Col. 8,  
lines 60-67 and Col. 9, lines 1-31 of Chou (see, Final Office  
Action, page 2, lines 12-14) show "controlling the sledge based  
upon the detecting acts", in fact, these sections of Chou describes  
no such interaction. While it is true that "FIG. 9 is a drawing,

schematically illustrating an inertia interaction between the sled motor and the tracking coil" (see, Chou, Col. 8, lines 58-60), in Chou, the compensating force  $f(s)$ , is only utilized to control the coil.

The sections cited in Chou merely show a series of equations (1), (2) and (3) used to derive the compensating force  $f(s)$  equation (4) (see, Col. 9, lines 7-17). The compensating force  $f(s)$  equation is a function of  $X1$  and  $X2$  which is the absolute position of the sled and the displacement of the coil relative to the sled, respectively (see, Col. 8, line 66 to Col. 9, line 1). So while compensating force  $f(s)$  is a function of the sled position and the relative displacement of the coil, the compensating force  $f(s)$  is not applied to control the sled! As made abundantly clear by each of FIGs. 10-13, the compensation of the motion of the coil is performed by applying a compensating force  $f(s)$  to the coil. (For example, see, Col. 9, lines 16-23.)

In the Response to Arguments on pages 5-6 of the Final Office Action, the Final Office Action states on page 6 that "in order to reduce the fluctuation (coil velocity) detecting from the signals  $Tcs$  and  $Vspd$ , needs to include the sledge velocity, therefore, the

sledge signal FMO is control[led] base[d] on the coil TRO signal of the PUH". The Applicant respectfully disagrees.

In Chou, the sled/sledge FMO signal is not controlled based on the coil TRO signal. While the Tcs and Vspd signals may implicitly include the sledge velocity, that does not mean that the FMO is controlled based on the coil TRO signal as suggested by the Final Office Action. The TRO signal is a different signal than the FMO signal and FIGs. 10-13 show that the FMO signal is not controlled based on the coil TRO signal. Rather, Chou states that "the FMO signal is used to produce the TRO signal" (see, Col. 9, lines 30-31). In other words, a TRO signal may be based on the FMO signal but clearly the FMO signal is not based on the TRO signal or any feedback thereof.

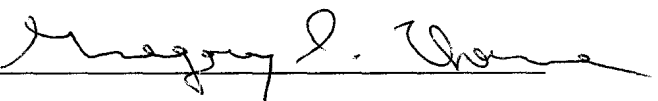
Based on the foregoing, the Applicant respectfully submits that independent claims 1 and 8 are patentable over Chou and notice to this effect is earnestly solicited.

Claims 2-7 and 9-15 respectively depend from one of claims 1 and 8 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of said claims.

In addition, Applicant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicant reserves the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicant has made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

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